



BPR-A-S

● Water pressure measurement ● 50 to 200 kPa

Small-sized Pore Pressure Transducer



Suitable for model experiments, highly-sensitive, small levels of pore pressure.

- Small-size (20 mm diameter), small rated capacity (50 to 200 kPa) and high sensitivity (1 mV/V)
- Filters are stainless (Standard 10 μ m)

Featuring an outer diameter of 20 mm, the BPR-A-S series is highly sensitive transducers for measurement of small levels of pore pressure. A watertight design enables embedment applications and makes them suitable for model experiments.

To Ensure Safe Usage

For long-term measurement, it is recommended to separately measure temperature and atmospheric pressure for compensation of measured values.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 1\%$ RD (50kPa) Within $\pm 2\%$ RD
Hysteresis	Within $\pm 1\%$ RD
Rated Output	0.4 mV/V or more (50kPa) 0.8 mV/V or more (100kPa) 1 mV/V or more (200kPa)

Environmental & Mechanicals

Safe Temperature	0 to 50°C (Non-freezing)
Compensated Temperature	0 to 30°C (Non-freezing)
Temperature Effect on Zero	Within $\pm 0.3\%$ RD/°C (50kPa) Within $\pm 0.4\%$ RD/°C (100kPa) Within $\pm 0.7\%$ RD/°C (200kPa)
Temperature Effect on Output	Within $\pm 0.1\%/°C$

Electrical Characteristics

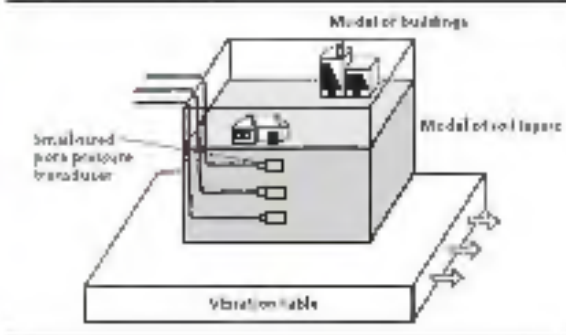
Safe Excitation	5 V AC or DC
Recommended Excitation	1 to 5 V AC or DC
Input Resistance	1.0 Ω $\pm 5\%$
Output Resistance	1.20 Ω $\pm 5\%$
Cable	A conductor (0.08 mm ² cross-section) shielded cable. 4 mm diameter by 10 m long, terminated with a connector plug. PCC3-12A10-7M (Shield wire is not connected to the cable)

Mechanical Properties

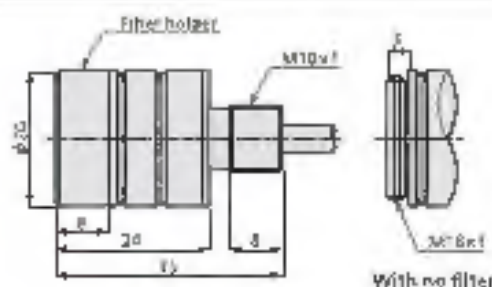
Safe Overload	120%
Material	Stainless steel metal (finish)
Degree of Protection	IP68 (IEC 60529) (Safe overload)
Weight	Approx. 30 g

Model	Rated Capacity
BPR-A-50KPS	50 kPa
BPR-A-100KPS	100 kPa
BPR-A-200KPS	200 kPa

Application Example



Dimensions



- * Filter is thrust into the filter holder, which can be removed from the pressure sensor.
* Flat filter only is usable and any cone filter cannot be used.